

SAFETY DATA SHEET

GHS format

SECTION 1 IDENTIFICATION**Product Name:** Mineral Refrigeration Oil #3, Hydro-Balance**Product Number(s):** H-2301, H-2305, H-2355**Product Use:** Compressor lubricant**Restrictions on use:** None specified**Company Name:** North American Research Corporation

P.O. Box 1318

Lewisville, TX 75067

Telephone Numbers: (972) 492-1800, (800) 527-7520, Fax (972) 394-6755**Emergencies:** Infotrac (24 hours, everyday) (800) 535-5053 (US & Canada) 1 (352) 323-3500 (International)**SECTION 2 HAZARD(S) IDENTIFICATION****Classification:** Not classified.**Signal Word:** No signal word.**Hazard statement(s):** No known significant effects or critical hazards.**Precaution(s):** No specific phrases required.**Other Hazards:** Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.**Symbol(s):**

None

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS Registry No.	%
Distillates (petroleum), clay-treated heavy naphthenic	64742-44-5	100

If the specific chemical identity and/or the exact percentage of an ingredient is not specified, the information has been withheld as a trade secret.

SECTION 4 FIRST-AID MEASURES**Eye contact:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.**Skin contact:** Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.**Ingestion:** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.**Most important symptoms/effects:** Irritation, dryness, cracking.**Indication of immediate medical attention and special treatment needed, if necessary:****Notes to physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.**Specific treatments:** No specific treatment.**SECTION 5 FIRE-FIGHTING MEASURES****Extinguishing Media:** CO₂, dry chemical, alcohol-resistant foam, water spray, water spray (fog).**Unsuitable Extinguishing Media:** Do not use water jet.**Specific hazards arising from the chemical:** In a fire or if heated, containers may burst due to increased pressure.**Hazardous thermal decomposition products:** Carbon dioxide, carbon monoxide.**Special protective equipment for fire-fighters:** As appropriate for surrounding fire.**SECTION 6 ACCIDENTAL RELEASE MEASURES****Personal precaution, protective equipment and emergency procedures:** Personal protective equipment must be worn. Ventilate area if spilled in a confined space or other poorly ventilated area.**Environmental precaution and protective procedures:** Take precautions to avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.**Methods and materials for containment and cleaning-up:**

Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

SECTION 7 HANDLING AND STORAGE**Handling Procedures:** Wear appropriate personal protective equipment. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product.**Storage Procedures:** Do not store near potential sources of ignition. Keep container tightly closed when not dispensing. Keep only in original container. See section 10 for incompatible materials.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits	OSHA PEL	ACGIH TLV	NIOSH REL
Distillates (petroleum), clay-treated heavy naphthenic	TWA: 5 mg/m ³ (8 hours)	TWA: 5 mg/m ³ (8 hours) Form: inhalable fraction	TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures:

Respiratory Protection: Normally not required. If used where mist may occur at high levels, use NIOSH/MSHA approved apparatus.

Eye Protection: Safety glasses.

Skin Protection: Avoid prolonged and/or repeated contact. If prolonged contact cannot be avoided, wear protective impervious gloves and clothing. Acceptable materials for gloves include PVC, Neoprene, Nitrile, Polyvinyl Alcohol, and Viton. Wash thoroughly after handling this product.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to yellow viscous liquid	U/L flammability or explosive limits	Not available
Odor	Hydrocarbon	Vapor pressure	<0.011 kPa (<0.08 mm Hg) [room temperature]
Odor threshold	Not available	Vapor density	Not available
pH	Not applicable	Relative density (specific gravity)	0.916
Melting point/freezing point	0°C (32°F)	Solubility(ies)	Insoluble in water
Initial boiling point and boiling range	207 to 750°C (404.6 to 1382°F)	Partition coefficient: n-octanol/water	Not available
Flash point	Closed cup: 98 to 344°C (208.4 to 651.2°F) Open cup: 168°C (334.4°F) [Cleveland.]	Auto-ignition temperature	Not available
Evaporation rate	Not available	Decomposition temperature	Not available
Flammability (solid, gas)	Not applicable	Viscosity	30 cSt (40°C/104°F)

SECTION 10 STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: No specific data.

Incompatible materials: No specific data.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 TOXICOLOGICAL INFORMATION**-- ACUTE EXPOSURE --**

Eye Irritation: Not expected to cause eye irritation. Based on data from components or similar materials.

Skin Irritation: Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated contact may cause dermatitis.

Respiratory Irritation: If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.

Dermal Toxicity: The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.

Inhalation Toxicity: No data available to indicate product or components may be a toxic inhalation hazard.

Oral Toxicity: The LD50 in rats is > 5000 mg/Kg. Based on data from components or similar materials.

Dermal Sensitization: No data available to indicate product or components may be a skin sensitizer.

Inhalation Sensitization: No data available to indicate product or components may be respiratory sensitizers.

Aspiration Hazard: Not classified.

-- CHRONIC EXPOSURE --

Chronic Toxicity: No data available to indicate product or components present at greater than 1% are chronic health hazards.

Carcinogenicity: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive Toxicity: No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

Teratogenicity: No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

-- ADDITIONAL INFORMATION --

Other: No other health hazards known.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulation potential: No information available.

Mobility in soil: No information available.

Other adverse effects: No known significant effects or critical hazards.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal Considerations: All disposal practices must be in accordance with local, regional, national and international regulations.

Contaminated Containers or Packaging: Dispose of packaging or containers in accordance with local, regional, national and international regulations.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT, TDG, IMDG, IATA:

Not regulated

SECTION 15 REGULATORY INFORMATION

TSCA: All components of this product are on the U.S. Toxic Substances Control Act (TSCA) Chemical Substances Inventory or are exempt.

CERCLA: No reportable ingredients.

SARA TITLE III:

Section 311/312 Hazard Category: Acute: Yes Chronic: No Fire: No Reactive Hazard: No

Section 313 Reportable Ingredients: No reportable ingredients.

CALIFORNIA (Proposition 65): No reportable ingredients.

SECTION 16 OTHER INFORMATION

Date Prepared: Feb. 16, 2015 **Replaces:** Aug. 23, 2012

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of North American Research Corporation. The data on this sheet are related only to the specific material designated herein. Final determination of suitability of any material is the sole responsibility of the user. North American Research Corporation assumes no legal responsibility for use or reliance upon these data.